

125
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INFORMATION REPORT

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25 YEAR
RE-REVIEW

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1. During and shortly after World War II, the Sousedik firm in Vsetin (N 49-20, E 18-00), which became MEZ, National Enterprise, in 1946, produced squirrel-cage induction motors which were designated as type "T". The motors developed a relatively high output, considering their weight. Shortly after MEZ was established, the production of these motors was discontinued. No other Czechoslovak factory produced type "T" squirrel-cage induction motors.
2. Squirrel-cage induction motors of medium size were produced at MEZ Frenstat, National Enterprise, in Frenstat pod Radhostem (N 49-33, E 18-30). Squirrel cage induction motors, in large sizes and entirely enclosed, were produced at MEZ Drasov, National Enterprise, in Drasov (N 49-20, E 16-29). The largest-size squirrel-cage induction motors were produced by the V.I. Lenin Works and by CKD Stalingrad.
3. In addition to squirrel-cage induction motors, the Sousedik firm produced wound rotor induction motors; MEZ Vsetin continued this production. These motors were designated type "S". The MEZ production program included the following sizes, determined by the diameter of the stator lamination: 315 or 375 mm. for the smallest type, progressing to 400, 450, 500, 560, 630, 710, and 800 mm. The production program also called for wound rotor induction motors of 900 mm. and 1,000 mm., but these sizes were not yet designed as of late summer 1954. All of these dimensions complied with the Ra20 line of the CSN-ESC (Czechoslovak Standards - Czechoslovak Electrotechnical Union). For example, the designations of the motors were S 37, S 40, S 45, etc.
4. During 1949 and 1950, Ing. Vojtech Filek and Rudolf Triska, preliminary designing engineers for induction motors at MEZ Vsetin and MEZ Frenstat respectively, worked together on a new series of induction motors in order to agree upon similar design features for induction motors produced in both enterprises.

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- 2 -

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5. The new series for MEZ Vsetin, resulting from this cooperative effort, was designated as type "Sn" and had the same dimensions as the type "S" series, the motors being modified to make them more modern. Designations, for example, were Sn 40, Sn 45, etc. The new "Sn" series gradually replaced the old "S" series; a particular motor was produced according to the "S" series only when the same type of motor had not yet been designed in the "Sn" series. Each type of motor in each of the two series was produced in two lengths, the length of the motor being determined by the length of the stator lamination. An "A" was added to the designation to indicate a longer motor of a particular type; for example, Sn 40 A. The longer motor developed a higher output. Each motor was produced with a different number of poles, i.e., 2, 4, 6, 8, 10, etc., which resulted in the number of revolutions per minute being 2,900, 1,470, 980, 735, 590, etc., respectively. Most of the motors were only half covered.
6. The motors of the "Sn" series were less expensive and weighed less than similar motors which had been formerly produced by other Czechoslovak factories. However, the frame and shields of the motors were too light, a defect which was actually the result of poor designing. The motors were also rather carelessly manufactured. The defects were not so apparent in small-size motors but were very noticeable in the larger motors.
7. Complaints about the unsatisfactory performance of the motors culminated in the incident commonly referred to in the plant as "Soviet 80". About 1951, MEZ exported to the USSR 25 wound rotor induction motors, type Sn 80, six poles, output 500 or 600 kw.

After a relatively short period of time, the Soviets began returning the motors for repair because, in addition to the mechanical defects mentioned above, the motors heated and did not develop the desired output. As a matter of fact, the actual output of some of the motors did not even reach half the output for which they were designed. Complaints about the quality of the motors had also been received from other customers, both foreign and domestic. The Ministry of State Control and the StB became involved; and finally, in October 1952, four principal technicians from MEZ Vsetin were arrested. They were Ing. Vojtech Filek, chief of specifications, Milan Hudec, chief designer, Novotny (fnu), chief of the testing plant, and Josef Jarous, chief of technical administration. They were brought to trial in May 1954. [redacted] the trial took place in Uherske Hradiste (N 49-04, E 17-27). All were found guilty of sabotage by negligence and sentenced to prison.¹

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8. After the beginning of 1952, wound rotor induction motors, type MNT 15, were produced at MEZ Vsetin. They were originally designed and produced by CKD Stalingrad. MEZ production of this type motor was based entirely on CKD blueprints. CKD also continued production of these motors after production was started at MEZ Vsetin. The motor was entirely open, not half enclosed as was the usual practice. The design was obsolete and the motor was equipped with sleeve bearings.
9. Squirrel cage induction motors with stator lamination diameters of 630 or 710 mm. were also produced by MEZ Vsetin. The motors were designed by MEZ Development. The shields were welded to the frame, not fastened by means of screws, which was the usual practice. This design made motor repairs much more expensive. Some of these motors were delivered to Miechowice, Poland (near Bytom, N 50-21, E 18-58), in 1951 or 1952. [redacted] they were for a power plant there. The motors proved to be defective. Dr. Vilem Klima,

25X1

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- 3 -

25X1

manager of MEZ Development at the time the motors were designed, was held responsible for these defects, as well as defects in other machinery, and was brought to trial along with four other technicians (see paragraph 7). Klima was found guilty of sabotage by negligence. He was scheduled to be released from prison in October 1954.²

10. Wound rotor induction motors of medium size were usually produced at MEZ Vsetin only. Occasionally, however, V.I. Lenin Works and CKD Stalingrad produced them when these factories delivered and installed complete electric equipment which included medium size wound rotor induction motors, e.g., rolling equipment of this type for the Klement Gottwald New Foundry in Kuncice near Ostrava was delivered by the V.I. Lenin Works. Large-size wound rotor induction motors were produced by V.I. Lenin Works and CKD Stalingrad. Small-size wound rotor induction motors were produced by MEZ in Brno-Zidenice. This production was transferred from MEZ Vsetin to MEZ Zidenice during 1950. Production of the largest-type wound rotor induction motors (315 or 375 mm.) produced by MEZ Zidenice was transferred from MEZ Zidenice back to MEZ Vsetin during 1953.
 11. Prior to 1949, production of induction motors comprised about 70% of the production at MEZ Vsetin. In addition to wound rotor induction motors, three-phase commutator motors and DC machinery were produced in the plant. After 1949 the production of DC machinery increased gradually so that during 1954 the production of wound rotor induction motors made up less than 50% of the total factory output and there was a tendency toward continued gradual decline. 25X1
the value of the total factory output was between 60 and 100 million crowns (post-currency-reform) in 1953.
 12. The domestic market for wound rotor induction motors was almost entirely supplied by MEZ Vsetin. For instance, the plant delivered motors to the Manganese-Pyrite Mines in Chvaletice (N 50-02, E 15-26) and to the Komorany (N 50-32, E 13-34) power plant. The most significant of recent domestic orders was a series referred to as "1,000 electric motors for agriculture". Only small motors within the medium size range were included in this program, all of which were to be delivered during 1954.
 13. MEZ Vsetin also exported induction motors during 1952. Two units of type S 80 were delivered to the Solvay chemical concern in Poland. The motors had two poles, 2,900 rpm, and developed 600 hp or kw; 25X1
In addition to the squirrel-cage induction motors mentioned in paragraph 9 above, MEZ delivered about 10 units of the Sn 80 type, equipped with several poles, to the Miechovice power plant. Several series of small wound rotor induction motors, probably type S 40 or a closely related size, were delivered to the USSR during the years 1946 through 1949. Each series included from 300 to 800 units. After 1949, the factory continued to export induction motors to the Soviets; however, only large motors within the medium size range were exported, and then in small quantities or individually. MEZ Vsetin also exported induction motors to other Satellite countries, but in very small quantities only.
- 25X1

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